



DEPARTMENT OF THE NAVY
COMMANDER NAVY REGION SOUTHWEST
937 N. HARBOR DR.
SAN DIEGO, CA 92132-0056

IN REPLY REFER TO:
COMNAVREGSWINST 11350.1A
N46MA

2 OCT 2008

COMNAVREGSW INSTRUCTION 11350.1A

From: Commander, Navy Region Southwest

Subj: REGIONAL CONSTRUCTION AND DEMOLITION DEBRIS (C&D) LANDFILL
DIVERSION.

Ref: (a) OPNAVINST 5090.1B
(b) COMNAVBASE SAN DIEGO CA 140607Z Aug 97
(c) DODI 4715.6
(d) NAVFAC Southwest Stand Alone Contracts and MACC
Delivery Order General Requirements; (Composite)

Encl: (1) Local Projects Opportunity Assessment Form
(2) Construction Waste Management Plan Review Flow Chart
(3) Process to Estimate Construction and Demolition
Debris (C&D) Diverted from the Miramar Landfill
(4) Landfill Coupon Process Flow Chart
(5) Construction and Demolition Debris C&D) Awareness and
Operations Training Syllabus
(6) Construction and Demolition Debris Training Schedule

1. Purpose. The Navy is vigorously pursuing programs to maximize the diversion of materials entering the landfills, particularly construction and demolition debris (C&D) and land clearing materials. References (a) and (b) both recognize that the Navy's best interests are served through recycling and/or reuse and proper management of C&D. This instruction establishes policy to formally address the issue of C&D management and diversion, within the Commander, Navy Region Southwest (CNRSW) Area of Responsibility (AOR) for all Demolition, Renovation and New design projects and future solicitations.

2. Cancellation. COMNAVREGSWINST 11350.1.

3. Scope

a. This instruction has been expanded to incorporate and implement policy for C&D diversion at the regional activities, complexes, and installations within the CNRSW AOR. This instruction is to be utilized in conjunction with existing local

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instructions to provide more stringent management and diversion of C&D and land clearing materials throughout CNRSW AOR. Where discrepancies or anomalies occur, this instruction shall take precedence to provide clarity to any local facility instructions as CNRSW Solid Waste Diversion management responsibilities expand throughout the AOR.

b. This instruction shall apply to all Navy entities in the AOR that prepare construction/demolition documents, manage construction/demolition projects and/or use landfills, transfer stations or material recovery facilities for waste disposal. As an example, through not limited to this list, the following entities shall adhere to this instruction:

- (1) NAVFAC SOUTHWEST
- (2) Construction Battalion Detachments and Units
- (3) Self-Help
- (4) Navy activities (e.g. NEX, MWR, DECA) that generate C&D.

4. Background. The intent of this document is to conform to sustainable development concepts. Reference (a) establishes a goal of forty percent solid waste diversion from landfills. References (b) and (c) reinforce the position, that it is in the best interest of CNRSW and of the Navy to divert C&D from landfills for both financial and environmental benefits. In a proactive manner, the Navy has outlined an internal plan to assist the cities in the State of California and the City of Fallon, Nevada in reaching their solid waste diversion goals. In that plan, proper management of C&D and land clearing materials is paramount.

5. Policy

a. C&D waste management and diversion shall be practiced on all CNRSW construction/demolition projects managed and executed within the region that produce C&D waste as described in the following two-part policy.

(1) Construction contracts that will generate C&D waste within the AOR (Typical C&D projects).

(2) Construction contracts that will generate C&D waste and utilize the Miramar landfill for disposal.

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b. The COMNAVREGSW Integrated Solid Waste Management Program (ISWMP) Office and/or Regional Activity Solid Waste Coordinator (RASWC) shall work closely with the design/contract agent during the development of the requirements for the contract documents on all projects, so that the diversion requirements are incorporated into the contract. The ISWMPs/RASWCs shall be informed of, and will attend, the pre-design meeting for the design-build contracts, to ensure the contractor maximizes diversion efforts during demolition and/or construction.

6. Specification

a. NAVFAC Southwest has developed and implemented General Conditions (d). These instructions, along with the specifications, provide guidance and policy for C&D diversion on construction/demolition projects managed by NAVFAC Southwest.

b. For local projects (i.e. Seabees, Self-Help, MWR or Public Works Shops) the Public Works Officer (PWO) shall ensure solid waste diversion goals similar to those in construction contracts are implemented in construction and demolition projects performed by government personnel. Enclosure (1) is a sample of Local Projects Opportunity Assessment.

c. Typical C&D projects: Contracted documents shall include enclosure (2) in the project specifications for design/bid/build contracts, and/or enclosure (3) for Solution Order or design-build contracts. Enclosure (2) was developed locally at NAVFAC Southwest as a Regional Guide Specification.

d. C&D projects that utilize Miramar landfill: The construction waste management process involves estimating the quantity of C&D waste that can be diverted from landfill, authorizing a maximum quantity of C&D waste that will be allowed to be deposited with free coupons in the landfill, and record keeping and reporting of quantities by weight of C&D waste deposited and diverted from Miramar landfill.

(1) Contract documents shall include enclosure (3) in the project specifications for design/bid/build contracts, and/or similar requirements in the performance specifications for Solution Order or Design/Build contracts.

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(2) Construction contract project scopes for projects estimated to generate C&D waste shall define the requirement for recycling and an opportunity assessment shall be performed by the project designer. The focus/intent of an opportunity assessment is to determine the potential quantity of C&D waste requiring construction waste management. The total amount of construction waste generated shall be evaluated with an estimate for the amount of C&D waste that can be diverted from a typical landfill or more specifically the Miramar landfill through salvaging, reuse or recycling. An economic analysis comparing commercial landfill disposal costs to diversion costs shall be included in the opportunity assessment. The opportunity assessment will be reviewed and approved by NAVFAC Southwest Project Leaders.

(3) The estimated construction waste generated by a project, less the estimated amount diverted by methods described in enclosure (3), shall be used to determine the number of tons allowed for disposal at the Miramar landfill at no cost to the contractor. Enclosure (3) for design/bid/build projects and similar documentation in requests for proposals (RFP's) for design/build projects and Solution Order contracts shall identify the amount of C&D waste the Navy will allow for disposal in the Miramar landfill from each project with free coupons.

(4) Enclosure (3) requires the contractor to provide monthly reports to the Navy Technical Representative. Enclosure (4) provides the means for reporting the total amount of C&D waste that is diverted from the Miramar landfill through salvaging, by reuse or recycling.

7. Submittals

a. For construction contracts, as part of the design, an Opportunity Assessment shall be performed for the project (similar to enclosure (1)). The Opportunity Assessment will evaluate waste management practices that can feasibly be utilized on the project and will list types of waste generated and estimated quantities for the project. Using the Opportunity Assessment, the contractor shall conduct a site assessment, verify the types and quantities of materials on the project that are anticipated to be feasible for on-site processing or source separation for re-use and recycling and, shall note the procedures intended for a recycling, re-use or salvage program. Both the Opportunity Assessment (OA) and the contractor's

PROJECT PLAN

Project Solid Waste Management Plan (PSWMP) shall be submitted to the project manager and the CNRSW ISWMP office, or the RASWCs office for review and approval. A flowchart describing the process of review and approval for the PSWMP submittal is included in enclosure (2). If approval has not been received at the end of three working days from the ISWMP office, the plans shall be considered "de facto" approved.

b. For local projects, the PWO or designee shall do the Opportunity Assessment and shall complete a PSWMP listing diversion procedures for the project. This requirement applies only when no outside contractor is involved (PWC, Seabee, Self Help, etc.). The OA, along with a PSWMP, shall be submitted to the CNRSW ISWMP office or the RASWCs office for review and acceptance. Enclosure (1) shall be used for the Opportunity Assessment.

c. C&D management requires extensive and comprehensive record keeping of waste generation and diversion. The contractor shall submit a C&D Diversion Summary, enclosure (3), attached with his progress payment invoice whenever there is diversion/recycling to report. The contracting officer or their designee shall forward the C&D Diversion summary to the CNRSW ISWMP office or the RASWCs office within five days of receipt. This form will be provided to PWC, PWOs, and SOUTHWESTNAVFACENGCOM for distribution to their contractors. Enclosure (3) shows the C&D Diversion Summary along with instructions on how to complete the form.

d. For local projects the PWO or his designee shall submit a completed C&D Diversion Summary to the COMNAVREGSW ISWMP office or the RASWCs office monthly.

e. All the submitted data from the Regional Activity Installations (RAI) shall be sent to the ISWMP office. Semi-annually, or as needed, the CNRSW ISWMP office will publish diversion quantities and data and submit to NAVFAC Southwest and RASWC.

f. Action: For construction contracts that will generate C&D waste and utilize the Miramar landfill for disposal:

(1) Project Planners, working with Project Leaders, shall determine the potential for C&D waste streams and include the cost savings or added disposal costs for reprocessing the materials in the DD-1391 project cost estimate.

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(2) Project Leaders shall:

(a) Ensure the C&D waste diversion opportunity assessment is performed by the projects designer.

(b) Ensure sources of C&D waste with the potential to be diverted from disposal at the Miramar landfill are identified.

(c) Define the maximum quantities for C&D waste that will be allowed to be deposited at the Miramar landfill with free coupons and include this quantity in the scope of work or performance specifications, as applicable.

(d) Facility Engineering & Acquisition Division/Resident Officers in Charge of Construction shall:

(3) Establish record keeping and coupon control procedures for each project to ensure the maximum quantity of C&D waste authorized in the contract documents is not exceeded.

(4) Collect C&D diversion data from construction contractor's monthly utilizing enclosure (4) and forward same to CNRSW ACOS for Environmental who has direct responsibility for data collection and reporting to Commander, Navy Region Southwest.

8. Landfill Coupons (Metro Area Only)

a. The estimated total waste generated on the project minus the C&D diverted shall determine the total waste that will be disposed at the landfill. The quantity of anticipated waste generated on the project taken to the landfill shall be specifically noted in the PSWMP. Free tipping, in the form of landfill coupons shall be provided to the contractor based on the Opportunity Assessment. The CNRSW ISWMP office will request landfill coupons from the City of San Diego for the project. These coupons will be issued to the Project Manager for distribution to the contractor. In no case shall more coupons be distributed to the contractor than specifically designated in the Opportunity Assessment.

(1) In the case of local projects, the CNRSW ISWMP office shall be notified, as loads are ready for transport to the landfill (Acceptance of the Solid Waste Management Plan (SWMP) and the Opportunity Assessment by the ISWMP office fulfill this requirement).

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(2) Load spot checks may be requested by the CNRSW ISWMP office to ensure it does not contain recyclable materials before the coupon will be given for that load.

b. Coupons are required for all contractor and Navy vehicles entering the landfill. The Project Managers shall distribute coupons to the contractors when needed for their respective projects. The city will refuse entry to the landfill to vehicles not in the possession of an approved coupon for the material being disposed at the landfill.

(1) Four different waste types are permitted to be taken to the landfill: general refuse, C&D, clean green and clean soil. These four different wastes will be identified at the landfill using a color-coded coupon system. Vehicles containing general refuse shall be admitted to the landfill with a white coupon. Vehicles containing C&D that cannot be recycled shall be admitted to the landfill with a blue coupon. Vehicles containing clean green shall be admitted to the landfill with a green coupon. Vehicles containing clean soil shall be admitted to the landfill with a brown coupon. Efforts shall be made to segregate materials into these four categories without cross contaminating the loads that are scheduled for diversion.

(2) General refuse that will be taken to the landfill shall consist of items such as, but not limited to: food waste and wrappers, bubble-wrap, Styrofoam, contaminated cardboard and similar items that are not readily recyclable.

(3) C&D that will be permitted to enter the landfill shall consist of items such as, but not limited to: asphalt shingles, painted wood, loads produced from clearing and grubbing operations that produce organics containing greater than ten percent soil and loads of this nature that are not readily recyclable commodities.

(4) Clean green that will be permitted to enter the landfill shall consist of clean green material which includes leaves, grass clippings, shrubbery, brush, tree trunks, limbs and branches less than ten feet long or six inches in diameter that are appropriate for mulching and composting. Clean green can also include clean wood scraps including lumber, plywood, broken pallets, wood blocks and shaving appropriate for mulching and composting. Clean green DOES NOT include palm trees, palm

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fronds, succulents, pampas grass, coral tree, bird of paradise or other fibrous types of greenery. Clean wood scraps DOES NOT include chipboard, particleboard and chemically treated or painted wood or wood shingles.

(5) Clean soil that will be permitted to enter the landfill shall be soil free of debris and contamination such that it meets the criteria set forth by the landfill engineer for acceptance as landfill daily cover material. From time to time, when necessary and if practical, the contractor may be requested to deliver clean soil loads to either the Arizona Landfill or Chollas Creek Landfill by CNRSW solid waste personnel and the City Landfill Engineer.

(5) Enclosure (4) is a flowchart describing the process of coupon receipt and distribution.

c. The CNRSW ISWMP office shall conduct unannounced periodic landfill spot-checks. At such time contractor and Navy vehicles entering the landfill will be routed to the side upon entry where a CNRSW professional will inspect their load, check what location and project they came from, and check for coupons.

9. Training. The City of San Diego and the Navy developed a one-hour C&D training course. Awareness training, for supervisors, contracting officers and planners as well as an operational training for front line managers has been developed. Representatives from the City, NAVFAC Southwest and CNRSW ISWMP office will present this training to provide awareness and methods for diversion on construction/demolition projects. This training shall be required for personnel involved in construction/demolition projects. The CNRSW ISWMP office as well as the RASWCs shall establish a training program and schedule. RASWCs shall utilize the training courses developed in the Metro area and refine it for presentation at their respective complexes and installations. Enclosures (5) and (6) are the syllabus for both the awareness and training course, and a proposed standardized Metro area annual training schedule.

10. Implementation. This instruction shall become effective immediately for all new and on-going construction/demolition projects within the CNRSW AOR.

a. All projects that are begun prior to the issuance of this instruction shall be phased into compliance with this instruction by 1 September 2004.

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b. CNRSW AOR professionals will work with the contract managers/administrators and contractors to achieve diversion on these projects to whatever means possible, including creating and amendment to the existing contract or work orders, if necessary to obtain C&D recycling.


M. R ALLEN
Chief of Staff

Distribution:

Electronic only, via CNRSW Directive Web site
<http://www.cnrsw.navy.mil/Admin/index.htm>

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**Local Projects
Opportunity Assessment Form**

In the case of local projects (i.e. Seabees, Self-help or Public Works Shops) the Public Works Officer or his designee shall complete this form for each individual project. This opportunity assessment shall be submitted to the COMNAVREGSW Integrated Solid Waste Management Program Office, and will be used to determine landfill coupons issued for the project.

Project Title: _____

Brief Project Description: _____

Project POC & Phone Number: _____

Project Duration: _____

Estimated Waste Stream Quantities

Generated on this Project

<u>Commodity</u>	<u>Estimated Quantity Generated</u>
Concrete	_____
Asphalt	_____
Clean Fill*	_____
Gravel*	_____
Brick*	_____
Organics*	_____
Metal	_____
Wood*	_____
Cardboard	_____
Gypsum*	_____

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Roofing

Materials/Shingles*_____

Textiles*_____

Other_____

NOTE: COMNAVREGSW Recycling Program will provide containers for recyclables upon request! POC: Mr. Matt Decker, Regional Recycling Operations Manager, @ 619-556-9331

NOTE: Commodities noted with an (*) are eligible for MIRAMAR Landfill Disposal Coupons. All other commodities listed must be sent to an appropriate recycling facility.

NOTE: When contractually agreed upon, or when contractors agree to donate material to the facility recycling program, the COMNAVREGSW AOR ISWMP Program may provide containers for recyclables upon request. However, the final decision to provide container(s) lies with the Activity Solid Waste Coordinator.

POCs are:

Mr. Matt Decker, Regional Operational, at (619) 556-9331

Mr. Cecil Cook, Recycling Site Coordinator, NAS Fallon, at (775) 426-2274

Mr. Greg Ollivier, Recycling Site Coordinator, NAS Lemoore, at (559) 998-3229

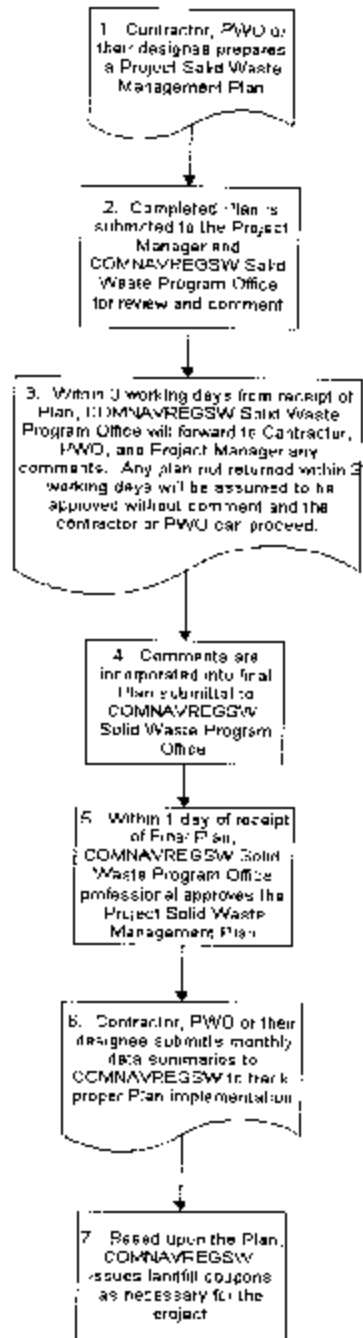
Mr. Juan Nodal, Recycling Site Coordinator, NAS Ventura, at (619) 520-5106

Mr. Dan Gandara, Recycling Site Coordinator, NWS Seal Beach, at (562) 626-7513

Mr. Alfredo Mendez, Recycling Site Coordinator, NAF El Centro, at (760) 339-2283

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Construction Waste Management Plan Review Flow Chart



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**Process to Estimate Construction and Demolition Debris (C&D)
Diverted from the Miramar Landfill For
Commander, Navy Region Southwest
Integrated Solid Waste Program Office**

1. A completed "Construction and Demolition Debris (C&D) Diversion Summary", form shall be attached to each monthly invoice. The quantities of materials diverted from the landfill shall be entered on the form, as well as where the materials were delivered. Weight tickets from the recyclers where the materials were delivered shall be attached to the form. This procedure has been established to gain accountability for C&D and to minimize the effort to comply with mandated regulations. Do not record refuse taken to the landfill on this form. The respective project managers shall forward the "C&D Diversion Summaries", with weight tickets attached, to COMNAVREGSW ISWMP office within five (5) days of receipt from the contractors.

2. In the case of local projects (Seabees, Self-help or Public Works Shops) and any other internal Navy projects where contractors are not involved, the FWO or his designee shall submit the form each month directly to the COMNAVREGSW ISWMP office or to the Regional Activity Solid Waste Coordinator's.

NOTE: COMNAVREGSW AOR ISWMP Program will provide containers when available for recyclables upon request!

POCs are:

Mr. Matt Decker, Regional Operational, at (619) 556-9331

Mr. Cecil Cook, Recycling Site Coordinator, NAS Fallon, at (775) 426-2274

Mr. Greg Ollivier, Recycling Site Coordinator, NAS Lemoore, at (559) 998-3229

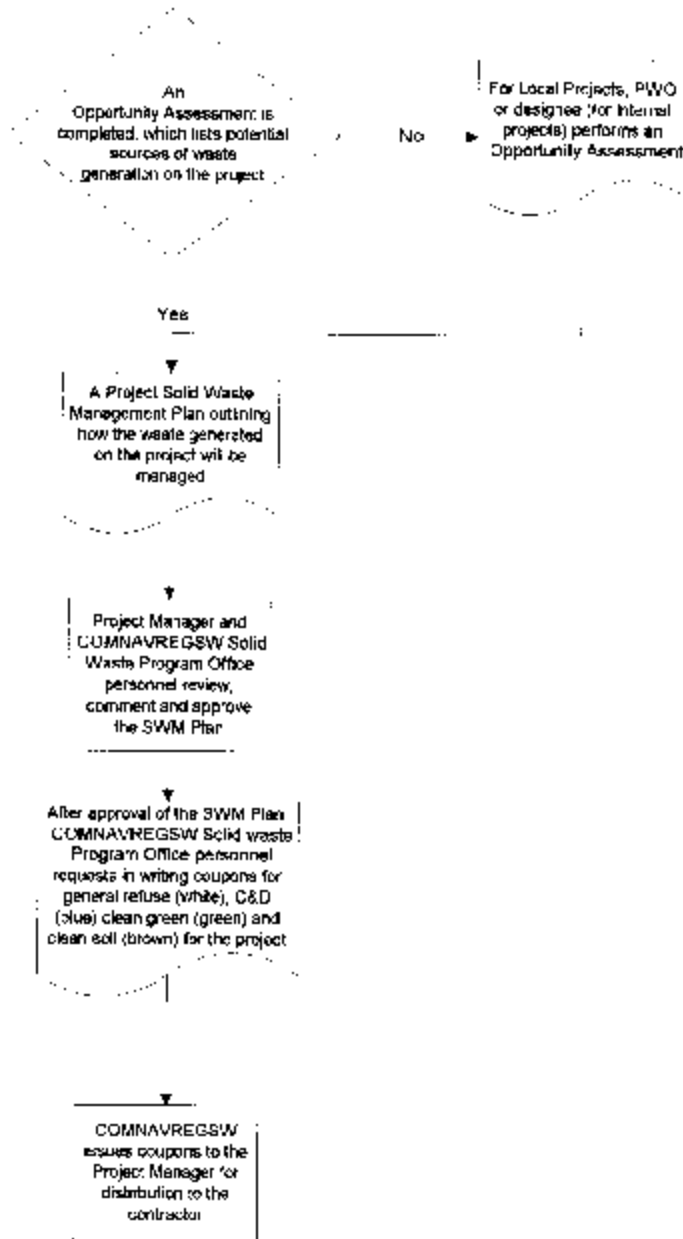
Mr. Juan Nodal, Recycling Site Coordinator, NB Ventura, at (619) 520-5106

Mr. Dan Gandara, Recycling Site Coordinator, NWS Seal Beach, at (562) 526-7513

Mr. Alfredo Mendez, Recycling Site Coordinator, NAF El Centro, at (760) 339-2283

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Landfill Coupon Process Flow Chart



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**Construction and Demolition Debris (C&D)
Awareness and Operations
Training Syllabus**

1. Introductions
2. What is Construction & Demolition Debris (C&D)?
 - a. Construction
 - (1) Wood (dimensional and structural)
 - (2) Drywall
 - (3) Cardboard
 - b. Demolition
 - (1) Soil/dirt
 - (2) Concrete
 - (3) Asphalt
 - (4) Rock
 - (5) Wood (dimensional and structural)
 - (6) Reusable building materials (doors, windows, sinks, cabinets, etc.)
 - c. Land Clearing Debris
 - (1) Trees, branches, roots, brush, etc.
 - (2) Soil/dirt
3. C&D Debris Management within SOUTHWESTNAVFACENGCOM:
 - a. SOUTHWESTNAVFACENGCOM Instruction 5090.3
 - b. SOUTHWESTNAVFACENGCOM Regional Guide Specification Sections 01573 & 01576
 - c. COMNAVREGSW Regional Solid Waste Management Instruction
4. Contract Preparations and Considerations:

Enclosure (5)

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a. Construction

- (1) Type of materials generated
- (2) Storage space available
- (3) Ability to reuse materials on-site
 - (a) Recycled content base aggregate
 - (b) Ground cover (mulch/compost)
- (4) Time constraints

b. Demolition

- (1) Type of materials generated
- (2) Size of project
 - (a) Process and reuse on-site
 - (b) Transport off-site to recycler
- (3) Follow on requirements (ability to use materials in later projects)
- (4) Storage space considerations
- (5) Housekeeping considerations
- (6) Reusable materials
- (7) Hazardous materials (asbestos, lead based paint, hydrocarbons, etc.)

c. Land Clearing

- (1) Type of material generated

d. Record Keeping

5. Use of Recycled Content Materials On-site:

- a. Recycled Content Base Aggregates (attached)
- b. Use of Mulch
 - (1) Erosion control

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- (2) Dust suppression
- (3) Weed control
- (4) Water conservation
- (5) Soil enhancement
- (6) Aesthetics
- (7) Recycled content building materials

6. Why Recycle?

- a. Tipping Fee Savings
- b. Transportation Savings
- c. Environmental Considerations
 - (1) Air quality
 - (2) Traffic

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**Construction and Demolition Debris
Training Schedule (Metro Area Only)**

1. This tentative Construction and Demolition Debris (C&D) Awareness and Operational Training schedule has been planned to provide two sessions for each focus area per complex annually. The initial training will provide background, outline current practices of diversion and direction to implement diversion on our construction/demolition projects. Subsequent training sessions will provide status to the participants on how we are attaining our goals, discuss new methods or technologies and keep the team aware of our progress.

2. Representatives from SOUTHWESTNAVFACENGCOM, PWC, COMNAVREGSW ISWMP office, and the City of San Diego will conduct these training sessions. The instructors will publish specific dates and meeting locations.

<u>Month</u>	<u>Complex</u>	<u>Focus</u>
January	Mainside	Awareness
February	Coronado	Operations
March	Point Loma	Awareness
April	Mainside	Operations
May	Coronado	Awareness
June	Point Loma	Operations
July	Mainside	Awareness
August	Coronado	Operations
September	Point Loma	Awareness
October	Mainside	Operations
November	Coronado	Awareness
December	Point Loma	Operations